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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,022	03/24/2005	Franco Sartori	MI 6054 (US)	8884

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EXAMINER	
SYKES, ALTREV C	

ART UNIT	PAPER NUMBER
1794	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/529,022	SARTORI ET AL.	
	Examiner	Art Unit	
	ALTREV C. SYKES	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *28 April 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) *5-8 and 10* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2005427*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-4 and 9 filed on April 28, 2008 is acknowledged. Claims 5-8 and 10 of Groups II and III are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected Groups II and III there being no allowable generic or linking claim.

2. The traversal is on the grounds that all of Applicant's currently pending claims recite, at least in part, component i) and/or component ii) and therefore recite a single inventive concept. While examiner does not argue that all of Applicant's claims recite at least in part, component i) and/or component ii) said argument is not germane to the fact that "A group of inventions is considered linked to form a single general inventive concept where there is a technical relationship among the inventions that involves at least one common or corresponding special technical feature. The expression special technical features is defined as meaning those technical features that define the contribution which each claimed invention, considered as a whole, makes over the prior art." MPEP 1893.03(d) As such, and as evidenced by Branchesi et al. (US 5,529,845) there is not a contribution over the prior art for the recited single inventive concept as acknowledged by Applicant. Additionally, the examiner notes that there is more involved in examining a patent application besides searching, such as formulating rejections and evaluating applicant's arguments.

3. The restriction requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102/103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 and 9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Branchesi et al. (US 5,529,845) as evidenced by Hechenbleikner et al. (US 4,755,546)

Regarding claims 1, 2, and 9 Branchesi et al. discloses polyolefin fibers suitable for the production of nonwoven fabrics by spun-bonding process, having improved strength and softness characteristics. (See Col 1, lines 5-8) Polyolefin fibers are disclosed which possess a high flexibility index and/or thermowelding strength, besides presenting good yellowing and aging resistance. (See Col 38-41) Further, Branchesi et al. discloses a fiber for nonwoven fabrics comprising a polymer material additivated with organic phosphites and/or phosphonites, HALS (hindered amine light stabilizers) and optionally phenolic antioxidants. (See Col 1, lines 53-56) Said polymer material being selected from: 1) isotactic propylene homopolymers having an isotactic index greater than 90; 2) random copolymers of propylene with ethylene and/or a C_4 -C_8 α-olefin; and 3) blends of homopolymers 1) with copolymers 2), or blends of at least one of the above mentioned homopolymers and copolymers with heterophasic propylene polymers. (See Col 1, lines 56-66) Branchesi et al. discloses said heterophasic polymers comprising (by weight): A) from 10 to 60 parts of a propylene homopolymer, or a copolymer of

propylene with ethylene and/or a C_4 -C_8 α-olefin, containing over 80% of propylene and having an isotactic index greater than 80 (Fraction A); B) from 1 to 25 parts of an essentially linear semicrystalline copolymer of ethylene with a C_3 -C_8 α-olefin, insoluble in xylene at ambient temperature (Fraction B); and C) from 15 to 87 parts of a copolymer fraction of ethylene with propylene and/or a C_4 -C_8 α-olefin, and optionally minor quantity of diene, said copolymer fraction containing from 10 to 80% of ethylene and being soluble in xylene at ambient temperature (Fraction C). Branchesi et al. also discloses that the fiber is obtained by a spinning process operating at a spinning temperature ranging from 260°C to 320°C, using polymers (1) or (2), or polymer blends (3), having MFR from 5 to 40 g/10 min. (Col 2, lines 1-22) Further, the random copolymers 2) contain a quantity of comonomer ranging from 0.05 to 20% by weight. When the quantity of comonomer exceeds 5%, said copolymers must be blended with the propylene homopolymer. (Col 2, lines 29-32) It is noted by examiner that Fraction A as disclosed by Branchesi et al. has an isotactic index greater than 80 and when mixed with Fraction B essentially a linear semicrystalline copolymer in the presence of Fraction C, would provide for a crystalline propylene composition as evidenced by Applicant's disclosure that the crystalline polymers exhibit a stereoregularity of the isotactic type. (See pg. 3, line 17) Therefore, the fiber of Branchesi et al. is equated to that of Applicant.

Additionally, Branchesi et al. fails to teach a content of fraction soluble in xylene at room temperature lower than 10% by weight and a value of the ratio of the polymer fraction collected at the temperature range from 25° to 95° C by fractionation with xylene

to the xylene soluble fraction at room temperature higher than 8. It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the fraction soluble in xylene and the value of the ratio of the polymer fraction since it has been held that, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). The burden is upon the Applicant to demonstrate that the claimed value of the ratio of the polymer fraction is critical and has unexpected results. In the present invention, one would have been motivated to optimize the fraction soluble in xylene and the value of the ratio of the polymer fraction motivated by the desire to provide a fiber having both softness and strength properties. (See Col 1, lines 38-42) Additionally, Branchesi et al. discloses the solubility in xylene to be measured at ambient temperatures. (See Col 2, lines 5-15) A prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985)

Finally, regarding claims 1 and 2 Branchesi et al. teaches the claimed invention above but fails to teach the composition having a melting temperature of 153° C or higher. It is reasonable to presume that melting temperature is inherent to the Branchesi et al. fiber. Support for said presumption is found in the use of like materials and/or like methods, as set forth above, which would result in the claimed property. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the

presently claimed properties would inherently have been present once the Branchesi et al. product is provided. Note *In re Best*, 195 USPQ at 433, footnote 4 (CCPA 1977).

Regarding claim 3, Branchesi et al. discloses the claimed invention but fails to teach wherein composition (A) is obtained by chemical degradation of a precursor polymer composition (B) having an MFR value (MFR (2)) of from 0.5 to 50g/10min, provided that the ratio of MFR (1) to MFR (2) is from 1.5 to 60. As evidenced by Hechenbleikner et al. (US 4,755,546) generally, olefin polymer compositions are vulnerable to deterioration of physical and chemical properties during manufacture, storage, processing and use. (See Col 1, lines 24-26) Olefin polymers are especially susceptible to oxidative degradation. (See Col 1, lines 34-35) The relatively high temperatures required for their customary processing procedures such as extrusion and the like, invariably promote oxidation because these processes are carried out under ordinary atmospheric conditions, i.e., they are exposed to the oxygen of the atmosphere. (See Col 1, lines 35-40) To overcome such deterioration, or at least to inhibit it, there have been developed additive systems which act to stabilize these polymers with respect to physical and chemical degradation. (See Col 1, lines 26-31) As Branchesi et al. discloses the use of additives of organic phosphites and/or phosphonites, HALS (hindered amine light stabilizers) and optionally phenolic antioxidants for the production of a spun-bonded fiber, it is noted that degradation was also inherent to the referenced invention. (See Branchesi et al. Col 1, lines 54-56) Further, it is noted that the intermediate precursor polymer composition (B) is not germane to patentability of the final product fiber as those limitations are met by Branchesi et al.

Regarding claim 4, Branchesi et al. fails to teach the difference in the ethylene content between polymer I) and polymer IIa) is at least 1 percentage unit with respect to the weight of the (co)polymer concerned. It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the ethylene content since it has been held that, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). The burden is upon the Applicant to demonstrate that the claimed ethylene content is critical and has unexpected results. In the present invention, one would have been motivated to optimize the ethylene content motivated by the desire to provide a fiber having both softness and strength properties. (See Col 1, lines 38-42)

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALTREV C. SYKES whose telephone number is (571)270-3162. The examiner can normally be reached on Monday-Thursday, 8AM-5PM EST, alt Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1254. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ACS/
5/19/08

/Carol Chaney/
Supervisory Patent Examiner, Art Unit 1794